[Connecticut Clockmakers]

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CONNECTICUT CLOCK / MAKERS

From the simple dignity of Colonial style to the stream-lined designs of modern age; from the painstaking, leisurely methods of craftsmen whose processes depended almost exclusively upon the coordination of hand and eye , to the robot labor of the machine — this in brief is the story of the clock industry over the past century and a quarter as it is reflected at the Seth Thomas plant, one of the first and one of the most famous [of the?] clock factories of New England.

Relatively gradual until recent years, the transition [has?] was [been?] accelerated by [with the advent of?] the depression, and the merging of the old company into a large corporation.

New methods, new machines, and a system of work production entirely alien to clock / making tradition have revolutionized the industry at Seth Thomas, which for [— for the past?] several years has been a subsidiary of the General Times Instruments Corporation.

The clock / maker of the past, trained after aptitude tests to a particular operation, made skillful by years of diligent application [to his job?] is being replaced wherever possible by younger workmen [??] [adaptable to change, with?] the physical stamina requisite for the operation of [the tireless?] machines. [they serve.?]

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A [far?] greater percentage of work than would have been thought possible short years ago is now done by women and girls. The emphasis is no longer upon craftsmanship, but upon speed, proponents of the new system contending that the remarkable precision 2 of the machines produces parts much nearer perfection than could be turned out by hand by the most meticulous workman.

Change has come recently with a rapidity bewildering to the few clock / makers of the old regime remaining in the service of the company, some of whom recall the famous “Nutmeg”, one of the first of the Seth Thomas [/Marine?] clocks, offered to the public under the [forthright?] slogan:

It stands up, bangs up, lies down, and runs all the time. The advertisement featuring this particular model — a lever movement, dubbed [/Marine?] because of its suitability for ocean travel — showed the sturdy little time-piece in every conceivable position.

Companion pieces of the nutmeg — in price brackets scaled to meet every demand — were clocks known to the trade as “ Jokers “ , and “ Anvils, “ “ Mikados “ , “ Ponies “ , and “ Echoes “ , [— the name in nearly every case opposite?] The “ Anvil “ , [for example?] was equipped with miniature anvil and hammer; the “ Mikado “ was ornamented with what purported to be Japanese script worked out in bronze; the “ Echo “ was a strident, but effective alarm. There were “ lodge “ models, cunningly contrived likeness of a cottage; “ crystals, “ with movements discernible through the glass ; [which enclosed it on all sides?] the still popular Gothic ; the “ Pilaster “ with its imposing columns.

[Though names were simply and descriptive, the?] clocks, especially those manufactured during the period following the close of the Civil War to the turn of the present century were conspicuously ornate. Scrollwork in wood and metal was [highly?] popular, and styles in clocks appear to have reflected, [insofar?] 3 [as a comparison is possible,?] the flamboyant Victorian architecture.

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In sharp contrasts both as to nomenclature and design, are the clocks manufactured by the company today. The current catalogue contains such models as the “Corona”, the “Duplex” (which combines a pen and pencil holder) the “Vista”, the “Talson”, the “Delart”, the “Anita”, the “Vogue”, the “Banner”, the “Janet”, the “Floret”, the “Sunset”, the “Vogue”. These models are exotically modern, [exert?] their appeal through such features as “recessed dials”, gold / plated hands protected by convex glass, and silvered metal mats. Retailing at prices ranging from seven to fifteen dollars, they [are designed to blend harmoniously with the decorations of the ultra sophisticate and?] have found a ready market. There is also the “ Delray “; with hour markers of “modern character”, silver plated; and the “ Matin “ described in the catalogue as a “distinctive clock in durable Ivory Catalin with stars to mark the hours.”

delete these quotes

At the other extreme, the old-fashioned cabinet and wall clocks, still popular with the conservative, have retained the fine lines of the originals and remain little changed, even mechanically. The tambour remains a highly popular model.

Recurrent demand for the old-fashioned types is noted [enthusiastically?] in the company catalogue.

[“Period Design Clocks — [Out of the days of stage coaches and hardy frontiersmen, and picturesque clipper ships, back when a ruddy glow from the burning log in the massive fireplace added a note of cheer and comfort to the family circle came a period of design with unusual charm and loveliness.” (To which 4 the old employees of the company add a fervent Amen.)?]

[??]

[Also?] retaining [outwardly at least the?] features of [the?] early models are chimes and banjo clocks. One of the most popular of the latter has a reproduction of Mount Vernon

on its cabinet, with a miniature of George Washington above, and the dial surmounted by an eagle [a deffant eagle?] , wings wide spread. Early catalogues are not available, but old employees of the company declare this model was manufactured from their earliest recollection.

A pamphlet distributed by the company describes briefly the history of the clock industry in America. Ebenezer Parmele, who began making clocks in his native town of Guilford in 1712 was the first clock / maker in Connecticut and is known as the father of clock / making in the state.

Parmele's clocks contained brass works. After the Revolution brass was scarce and clockmakers turned to the use of wood.

In 1797, Eli Terry was granted the first clock mechanism patent issued by, the United States patent office. In 1808 [?] [Terry?] [entered into a contract?] [made an astounding contract?] for the delivery of four thousand clocks, and in the same year he made the first 500 clocks ever produced by machinery In this country. In 1814 Terry perfected a 30-hour wooden shelf clock which made older models obsolete. These shelf cloaks were turned out by the hundreds. In 1808 a company formed by Seth Thomas, Eli Terry and Thomas Hoadley manufactured one-day wooden clocks which sold for eleven dollars; and Marsh and Gilbert in 1820 put on the market an eight-day wooden wheel clock, beautifully carved and expensive.

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Eli Terry's tower clocks were [very?] popular and accurate. An original Eli Terry clock with wooden works still operates in the tower of the 1838 Congregational Church in Terryville, [just?] across the way from the Town Hall.

When the Terry Tower clocks became profitable merchandise, the Seth Thomas Clock Company decided to enter that branch of the industry. Purchasing the A. S.

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Hotchkiss Tower Clock Company of Williamsburg, New York, in the early 1870's, the Seth Thomas firm first attained fame by making the Centennial Clock for Independence Hall in 1876. Tower Clocks for the Colgate Company in New York, one with a forty-foot dial and another with a fifty-foot face, are among the better known products of this firm.

Drastic changes in the industry came in 1837 when the art of rolling brass into sheets was discovered, and in 1842 thousands of 30-hour movements of brass were being made with clocks selling for $2.50. There followed a long and prosperous period during which the styles in clocks, as previously described, became somewhat heavy and ornate but the mechanics of the industry remained comparatively stationary. The expansion of the business, [however?], was directly responsible for the importation of [the?] German clock / makers, who even more than their Yankee predecessors, adhered to the traditions of craftsmanship and [who?] were regarded in their time as artists of the trade.

Several of the company's pensioners recall [nostalgically,?] the days when every operation in the manufacture of clocks called for [the?] skilled hands, the careful judgment of craftsmen trained by their fathers in one particular phase of the work. That the industry, or that portion of it exemplified by the 6 Thomaston concern, is still in a state of flux can be seen by the fact that a number of operations known to clock / makers since the beginning of the industry on a large scale have been made obsolete within the past last two years.

“Wheel truing”, for example, has been virtually abolished. Wheels were once “staked” by hand, whereas today they are turned out by a staking machine, operated, incidentally, by a woman.

Says the company's pamphlet: “Modern clock movements consist of a maze of wheels and pinions made on special highspeed precision machines. The intricate mechanism requires expert care and careful lubrication. Many pins and pinions are so small that they cannot be examined and measured with ordinary tools. A tool maker's microscope checks the parts to a tolerance of one ten-thousandths of an inch. Gears are machined from solid blanks on

special gear-holding machines. The foundation of a clock movement is two plates in which are held all the pinions, wheels, escapements, etc. These plates are drilled in pairs on multiple spindle drill presses, then, with the drills acting as guides, countersinking spindles form sockets in the plates.

“To the assembly line come thousands of parts all made to fit identical clock movements. Parts are added as the movement progresses along the line, and at the end the finished movement is checked and adjusted for tolerances. After assembly the clock movement is mounted in long lines and run for a period of time during which it is further checked and inspected.”

These processes are in direct contrast to the time-honored 7 methods of clock / making which they have supplanted. It is a common assertion [made by?] of the clockmakers of the old school, for example, that many of them could “put a clock together from start to finish;” that if a particular tool was needed for their work, it was not unusual for a man to take time off, go to the tool room and make it himself, rather than risk misunderstanding. This leisurely procedure was possible without loss of money for the operator because in many cases he was paid on a straight hourly basis, or because his piecework price was high enough to enable him to take time off from his operation and “ make it up “ later [?] in the day.

Under the Bedaux system, which has been in effect at the company for more than three years, [all that has been changed.?] [such a procedure is in?] [possible. This system, [which?] has changed the nature of the industry at Seth Thomas with bewildering rapidity, [is declared?] by its sponsors to be the most efficient method yet devised for the use of concerns paying their employees by “piecework.”?] [Under that?] Briefly, the system [operates as follows:?] / The worker is [carefully?] timed on every operation by men who have been trained [for the purpose?] by the company, allowance is made for adverse working conditions, and a “price” , or piece-work scale , is determined under which the job is [?] [henceforth?] done. There is a base rate on each operation , [a?] — [a minimal

hourly?] rate below which pay is not supposed to fall , — but workers complain that [they have been permitted to put in?] [have been permitted?] lower rates. Formerly, the price was established by the room foreman after a period of experiment, [a man usually well acquainted with all phases of the work,?] and workers contend that such a person is better qualified for the 8 purpose than an office-trained clerk who has no actual bench or machine experience.

[Union organizers, [however,?] are encountering difficulty in recruiting a sufficient number of workers from the large new bloc of female help. Many of [?] those [are?] working at their first factory jobs, are not familiar with [in complete ignorance of?] unions, their aims and operation, [and must be “educated” by organizers.?] Satisfied with small pay, and heedless of requests to attend union meetings, these younger women workers, who at present comprise a large percentage of the [entire working?] force, cannot be overlooked by organizers if the fifty-one per cent of the factory personnel necessary to the granting of a union charter is to be obtained.?]

[transpose this paragraph as indicated?]

[*1]

The installation of the [Bedaux?] system three years ago was bitterly opposed by many of the workers and a local union was formed which after several ineffectual parleys with company officials effected a short-lived strike.

A number of adjustments were made, and the strikers returned to work, but the union shortly thereafter passed out of existence. Dissatisfaction has again crystallized and at this writing an attempt is being made to form a union as an affiliate of the American Federation of Labor.

*1 [???] / [/The?] Bedaux system [is mention in passing solely?] because , *2 [of its drastic effect on the industry and because no up to date treatise could well ignore it.?] [According

to common report which indubitably has basis in fact,? *2] other clock / making concerns are its [watching close the?] operation [of the system here,?] and its eventual installation in neighboring clock factories (at Bristol) 9 is not impossible.

That clock / of the old school should be actively opposed to a system so foreign to everything which they had been taught can not [scarcely?] be wondered at. Unable to adjust themselves to the speed which is a requisite of the new method, firm in the belief that good clocks can be made only under the old system, they have presented a problem which the company has met by a retirement plan that [which?] is rapidly decimating their number at the factory. They gather now in little groups upon the streets of the town or in selected hangouts to discuss gloomily the change [evil days?] which [has ?] [have fallen upon?] the industry.

While allowance must be made for the bitterness with which the old timers of the industry view sweeping change, their belief that the work of the craftsmen was more solid and enduring is worthy of consideration. Instances where clocks of the old regime have given satisfactory service for fifty years and more have been recorded recently in the local press.

Their wholesale condemnation of modern methods, however, overlooks such extenuating circumstances as changing business conditions ; a competition which is fiercer today than at any time in the history of clock manufacture; and a constantly narrowing market.

Worthy of note also; as a precursor of the new trend, is the fact that new “hands” , hired in recent months , have been almost exclusively girls and boys in their teens. Company officials have made no open declaration of policy, but are reportedly seeking younger workers because of their plasticity — their greater adaptability to requirements of the system.

Female labor is likewise 10 more in the ascendant today than at any previous time, inasmuch as many jobs formerly suitable only for men are now done with relative ease by women [??] machine [?] operators. Rates of pay for woman workers average ten cents per

hour less than those of men, and this factor has acted as a depressant upon the prosperity of the town.

Prior to the merger of the company, exchange of workers with other clock / making concerns was a common occurrence , but due to the general tightening of the employment situation, the policy of “local help first” adopted by several neighboring manufacturers, and the lessening demand for the “craftsman” type of worker, this practice is rapidly disappearing.

One of the larger factories still favoring, more or less, traditional methods of clock manufacture is the Ingraham Company of Bristol, and this plant in former years absorbed many Seth Thomas trained men. A catch phrase of the craft in years gone by was “Seth Thomas trains 'em and Ingrahams hires 'em.” It was also the proud boast of the local company [that a job with them?] was the equivalent of a ticket to immediate employment in any clock factory in the country.

This picture has been changed notably with respect to the Ingraham company during the past year. Although a number of Seth Thomas trained workers are still employed at the Bristol plant, many were laid off during a recent business lull , in order that Bristol help might be retained. Those remaining were given to understand that they would be more kindly regarded by the company if henceforth they made their homes in Bristol.

At the Seth Thomas factory[, as has been pointed out,?] the 11 installation of the new system, with its [preponderant?] emphasis on machine work, has reduced to a minimum the demand for [the?] worker s trained in the old-fashioned way. Thus, the influx of workers from neighboring clock companues has been less during the past last three years than ever before.

At the same time there has been a considerable increase in the number of clerical workers and technicians, and many of these persons have been sent to Thomaston from other subsidiaries of the General Times Instruments Corporations.

The company maintains a research department, a modernized sales and advertising department, and has installed a “personnel” manager who interviews prospective employees and acts as a buffer between the help and executive offices. This is a departure from the old methods under which a man was usually hired directly by the foreman of a room, who obtained first the sanction of the superintendent.

These innovations are viewed with [immeasurable?] scorn by the old clock / makers, who point out that an office force numbering less than a dozen persons was deemed sufficient “in the good old days,” when, they assert, the total number of employees was greater than at present.

College-trained men are comparatively numerous, whereas in former years it was unusual for any but major executives to have had more than high school education.

The present foreman of the plating room, for example, is a graduate of Sheffield Scientific School, Yale University. Many of the office employees are younger men who have majored in business administration at nationally known universities, the company apparently favoring 12 this type of applicant over the graduate of the old-fashioned business school. But these bright young men are [also?] held in contempt by the ousted clockmakers.

What do they know about the clock business? All theory , — that's all, just theory.”

Company paternalism today is an impersonal, long-distance business, compared to the almost feudal type of employee-employer relationship of the past. The late Aaron Thomas, known to his workmen affectionately as “The Old Man” exemplified to a high degree this paternalistic quality. Mr. Thomas took exceptional interest in the affairs of his employees; it was not common for him to assist them in a quiet, unostentatious way in times of financial

stress, and his gifts to the town in which he was born and spent his life were many. In tribute to “the Old Man,” the entire working force of the factory accompanied his funeral cortege to the cemetery [on foot,?] on the day of his burial.

Thus a relationship which undoubtedly proved of advantage to the company has vanished, and in its stead there is the vague shadow of the corporation, huge, impersonal, intangible, and to the average worker, judged from informal conversations, somewhat sinister.

To encourage the feeling of followship between employees, the traditional “happy family” ideal, the company has organized softball and bowling leagues, and intra-department athletic contests of varied types. Athletic associations which are also active socially have also been formed for both men and women, and there is a foremans' association that [which?] holds weekly meetings at which there is invariably a guest speaker and entertainment.

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All this furnished the clock / makers of the old regime with material for sardonic comment, but the young recruits to the industry for whom it was primarily instituted have been enthusiastic.

All but lost in the shuffle has been the Tower Department, the activity of which is now at an all time low. Occupying astonishingly little space in the company's big new buildings as compared with former years, and with only a handful of employees assigned to the work, this once important department is close to the vanishing point. Orders for new tower clocks are few, [?] though there is considerable repair work. Tower clocks manufactured by Seth Thomas since the inception of this branch of the business in 1870 literally girdle the globe, having been sent to more than a hundred different countries. Whether the decreasing demand for this type of clock is due to business slump or is symptomatic of the approaching demise of the tower clock industry is problematic. It will be recalled that

Seth Thomas has manufactured the largest tower clocks in the world, including the famous Colgate clock, which weighs more than four tons.

A type of clock unknown in former years, however, but which now furnishes one of the most important sources of revenue for the concern, is the popular electrically-impelled movement. After an experimental period which preceded by a few years the absorption of Seth Thomas by the western corporation, the factory succeeded in producing a successful electric movement. These movements are constructed with comparatively few parts, the motor being the important element, and are [?] [fine?] time - keepers.

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It was thought by many that they would entirely supplant the spring movement, but there is a steady demand for the latter variety which makes this development unlikely, The electrics have, however, to some extent cut into the production of the spring-wind movements with a proportionately bad effect on the skilled clock / makers.

Further products of the modern age are various devices requiring clock mechanisms, such as fire alarms, water meters, timers of different types, lock works and the like, which serve to palliate to a certain extent the havoc wrought by radical change.

In summation, it may be stated that the greatest change in the clock / making industry in this representative instance has come within the past last ten years, or roughly, since the beginning of the economic debacle, and it is [a fairly?] obvious [fact?] that the primary cause of change has been the depression. The sale of the old concern, previously in the hands of one family for its entire existence, with the resulting disappearance of the more personal type of employer-employee relationship; the institution of the Bedaux system with its emphasis on speed as opposed to leisurely methods ; the manufacture of exotic types of clocks in an effort to catch a vitiated public fancy; the employment of young girls and boys in increasing numbers , and the retirement of skilled clockmakers, all have been the result of economic expediency.

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It seems likely that another ten years will see the passing of clock / making of the old type entirely, even in those few companies now retaining the old methods of manufacture, and the 15 clock / maker as a craftsman will exist only in the memories of a few ancient pensioners scattered throughout the Connecticut towns and cities where clocks have been made for nearly one hundred and fifty years.

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